

AN INTERFACE CIRCUIT FOR COUPLING BETWEEN LOGIC CIRCUIT  
DOMAINS

ABSTRACT OF THE DISCLOSURE

CMOS circuitry is partitioned into first and second logic circuit domains. The  
5 first logic circuit domain may be optionally a cuttable domains (C\_Domains) where  
circuitry has power supply gating to reduce leakage power and non-cuttable domains  
(NC\_Domains) where circuitry does not have power supply gating. Each output that  
couples signals from one logic circuit domain to another logic circuit is interfaced  
with a C\_driver and a S\_keeper which automatically assure that the output state is  
10 held when circuitry is power-gated put to reduce leakage power. The S\_keeper and  
C\_driver have low leakage circuits that maintain signal states and are not used for  
high speed operation.